

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE 1898: In the matter of the hearing called by the
Oil Conservation Commission on its own motion
to consider revising Rule 701 of the Commis-
sion Rules and Regulations to provide that
all wells included within any water flood
project area as defined by Rule 701, as well
as those wells outside of the project area
which are producing into common measuring
and storage facilities with wells inside
a water flood project area, shall be tested
monthly and the results of such tests
furnished to the Commission. It is further
proposed to consider revision of Commission
Form C-120 so that the results of such tests
may be included thereon.

BEFORE:

A. L. PORTER
MURRAY MORGAN

TRANSCRIPT OF PROCEEDINGS

MR. PORTER: We will take up next Case 1898.

MR. PAYNE: Case 1898. In the matter of the hearing
called by the Oil Conservation Commission on its own motion to con-
sider revising Rule 701 of the Commission Rules and Regulations to
provide that all wells included within any water flood project area
as defined by Rule 701, as well as those wells outside of the
project area which are producing into common measuring and storage
facilities with wells inside a water flood project area, shall be

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tested monthly and the results of such tests furnished to the Commission. It is further proposed to consider revision of Commission Form C-120 so that the results of such tests may be included thereon.

(Witness sworn.)

JOE D. RAMY

called as a witness, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. PAYNE:

Q Will the witness please state his name and position.

A Joe D. Ramy, proration manager for the New Mexico Oil Conservation Commission.

Q Mr. Ramy, are you familiar with Rule 701 of the Commission Rules and Regulations?

A Yes, I am.

Q And have you made a study concerning the desirability of amending this rule in certain particular?

A Yes, I have.

Q In what respect do you propose an amendment of Rule 701?

A In the interest of allowable control, I propose that certain well tests be required. My proposed amendment reads in its entirety as follows:

"Each and every well outside a prorated water flood project

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area which is producing into common facilities with wells inside a prorated water flood project area shall be tested once each month and the results of such tests shall be reported on Form C-120."

Q If I understand your proposal correctly, it is considerably narrower than that shown in the Rules. Do you propose to require only tests on wells outside of water flood areas as defined by Rule 701, you would require only that those be tested if they are producing into common facilities with water flood oil?

A That is correct.

Q In a prorated water flood?

A Correct.

Q Now, why do you feel that this provision, this amendment is necessary, Mr. Ramy?

A I think to effectively prorate water floods, it will be necessary to be in a position to adjust these allowables on these wells outside the water flood project area. I think, without these monthly tests, why an operator may not be aware that a well will decline or has declined and consequently, he could inadvertently produce some excess water flood oil to make up for this production decline.

Q In other words, a well outside the water flood project area which is producing into common facilities with water flood oil might be carried on the proration schedule as a twenty-barrel well?

A Correct.



Q And yet it may have declined to five barrels and the difference is being made up by the wells within a water flood project area?

A Yes, that is correct. He would have, in addition to his water flood project area allowable, he would have an extra twenty barrel allowable for that well. and I'm sure the operator, if he were able, he would make all the allowable assigned to him.

Q So it might well be then that the prorated water flood project would be producing in excess of its maximum project allowable?

A Yes.

Q And this could come about inadvertently?

A Inadvertently, I think so, yes.

Q Now, Mr. Ramy, wouldn't it be more effective if separate tankage was required for the water flood oil and the primary oil?

A Yes, I think so, but in considering the practicality of it, I think this would cause some undue hardships. There are bound to be one or two wells off to the edge, and for practical purposes, they should be put into the same battery.

Q So what you have done here, you've weighed the practicality of the situation, you weighed one hundred percent control as opposed to perhaps undue economic burden on the operator?

A I have tried to do that, yes.

Q Have you also considered the possibility of requiring separate metering of the wells outside the water flood project area which are producing into one facility with the water flood oil?



A Yes, I've considered that, but again, I think that would cause an undue hardship on the operator where the monthly well tests would be sufficient.

Q Now, Mr. Ramy, as advertised and shown on the docket, the proposed provision would require that the wells in the prorated water flood area also be tested monthly. Do you now propose that this not be required?

A Yes. This was considered, but I think primarily we are interested in allowable control, although if we required these tests in capacity floods, it would be for information purposes only, to determine if the water flood was performing as efficiently as possible, and I think that is a primary concern of the operator involved, and I think in most cases they are doing that, and I think where we would be interested in well tests in capacity floods would be outside or offset wells which are receiving a kick from the water flood, and I think that these tests can be obtained, these tests are required.

Q Rule 701 as now drafted, requires that a test be taken prior to administrative approval of the conversion of additional wells to water injection?

A Yes, that is correct, and I think we could witness these tests.

Q You are speaking about capacity floods, correct?

A Right.

Q It was also proposed originally, or at least the docket



and the advertisement so shows, that the wells inside a prorated water flood project would also have to be tested monthly as well as those outside?

A Yes.

Q Now, you don't propose to require any more --

A No, I don't think that would be of any importance really because we have a set and given allowable for those wells inside the prorated water flood area.

Q It is a maximum allowable, is it not?

A That's right.

Q So in certain situations, it might well be that if these tests are not required, the project would be producing somewhat in excess of what it should, but it would never be over the maximum?

A That is right.

Q Now, Mr. Ramy, do you propose that Form C-120 be revised so that the results of the tests taken on the wells outside the prorated water flood project which are producing into the common facilities, that the results of these tests will be able to be shown on Form C-120?

A Yes, I would recommend that. I think that would be the easiest for the operators, to list those wells. I don't anticipate too many wells really of this category, and I think either by adding a column or --

Q There might be a considerable number of them, might



there not, where an operator has a unit and the water flood is prorated and he installs an ACT system?

A Yes, there is that possibility.

Q Now, do you feel that what you are proposing here is the absolute minimum for relatively effective allowable control in prorated water floods?

A I do.

Q Do you have anything further you would like to offer, Mr. Ramy?

A No.

MR. PAYNE: That concludes the direct examination of this witness, Mr. Commissioner.

CROSS EXAMINATION

BY MR. PORTER:

Q Mr. Ramy, you don't have a copy of any proposed revised form C-120, do you?

A No, I do not.

Q Your recommendation would merely be to add a column wherein this test would be reported?

A Yes. I think possibly two columns showing the date of the test and the production.

MR. PORTER: Anyone else have a question?

MR. CAMPBELL: Mr. Porter, I'm Jack M. Campbell of Campbell and Russell, Roswell, New Mexico. I would like to enter an appearance in this case on behalf of Graridge Corporation and ask



Mr. Ramy a few questions.

Q (By Mr. Campbell) Mr. Ramy, would you state for the record what reports are now required with regard to production from all wells in New Mexico?

A A C-115 and I think a C-116.

Q Those are required for both wells on primary production and wells on secondary recovery, are they not?

A Yes, sir, they are.

Q And what do those forms require?

A They require the operator to list the production, and the C-115s list the per well production, oil, gas and water, and on the C-116, that is an official well test.

Q Due to the fact that a well test would have to be taken at some particular time during the month, don't you feel that actual production reports more accurately reflect down time, changing well conditions, than a test would on a particular day on a particular month?

A Possibly, however, assuming normal decline, I think sometimes the operators are a little slow or a little reluctant to report that a well has declined from fifteen to ten barrels. They have a tendency to let that ride for several months, Mr. Campbell.

Q This is not, I assume, confined entirely to secondary recovery projects, is it? I mean this same problem with regard to well changes would apply in any situation where you have common tankage for certain leases or a number of wells in the leases?



A That's right.

Q On those cases you have to rely upon a report made by the operator in its accuracy to determine whether or not he is confining himself to the actual per well allowable whether it is secondary or primary, do you not?

A That is correct.

Q Do you have reason to believe that an additional test or additional column on a report is going to, considering the administrative expense to the operator, is going to provide you with much better information than you are able to now obtain?

A Yes, I think so. I think your C-120s are more current than your C-115s, and I think you could adjust allowables on the basis of those tests months by month whereas if you have to wait for the actual production figure on the C-115, you are sometimes two, three months behind.

Q Have you made any study to determine in prorated floods, which I now understand you are confining your suggestion as to the number of wells that might be involved outside project areas but within the unit that may be producing into an ACT unit.

A No, sir, I have not. I don't know of any ACT unit on prorated floods as yet.

Q Of course the number of prorated floods as of now is rather limited, is it not?

A That is correct.

Q If an ACT unit is installed on prorated floods which



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have been unitized, as I understand your present proposal, you would require each month a testing of every well outside the prorated area that was producing into the LACT unit?

A Correct.

Q Mr. Ramy, can't you conceive of a situation where you might, under those circumstances, have a very large number of wells outside the project area which would have to be tested each month?

A Yes, and I think before you have a very large number of wells, the tests would be more important because of a greater allowable difference to play with.

Q Certainly, and you might have wells far removed from the actual project area where the fluxuation is not varied or where there are very low producing wells at the outset, might you not?

A If you take eighty wells that have an allowable of ten barrels a day which have a capacity of two barrels a day, that gives you eight times eighty is six hundred forty barrels a day, which you could visualize.

Q You might have a large number of wells which decline very slightly over a period of time, could you not?

A That's correct.

Q What type of testing is normally done? I don't know, what is involved in testing wells, or what type of test do you propose?

A I would propose just a monthly well test either through a header or through the separator. I think -- Let me add this further



I think most of your big units in the Caprock are set up to where approximately six wells go through a header system which enables the operator to test the wells once a month. Now, these, I know, are in wells that are active in the water flood area. As to the remainder of them, I do not know.

Q If the rule which you are now proposing is put into effect, it might require additional personnel to handle the testing or anything of that sort?

A I think it could, yes, Mr. Campbell.

MR. CAMPBELL: That's all the questions I have.

MR. PORTER: Anyone else have a question?

MR. PAYNE: Yes, sir.

REDIRECT EXAMINATION

BY MR. PAYNE:

Q Mr. Ramy, it is, of course, as Mr. Campbell pointed out, possible, is it not, for wells on primary to be producing more than their allowable?

A I think that is possible, yes.

Q Now, assuming that you have ten wells on a lease and the top unit allowable per well is thirty-six, the maximum that that operator can produce, even by the inadvertent judging of the figures, would be three hundred and sixty barrels?

A Correct.

Q If you have a prorated water flood project for each well and has an allowable of forty-two barrels, that's both injection



and producing wells, its maximum project allowable would be four hundred twenty barrels?

A Yes, with ten wells.

Q Now, is it possible in that case, if you have wells outside of the project area producing into that same battery, that he can get above the four hundred twenty maximum project allowable?

A Yes, it is very possible he would have this four hundred twenty plus the assigned allowable for the wells going into the same battery.

Q So that you don't have a comparable situation here when you are trying to compare it with primary production?

A No, I do not in one sense.

Q Now, isn't it also true, Mr. Ramy, at least in all recent automatic custody orders that this Commission has entered, that each of those contains a provision that the operator shall install adequate facilities to permit the testing of each well once each month to determine the production from that well?

A That is correct.

Q So that your proposal is not going to require any additional mechanical installations.

A No.

Q Because those are required now in the ACT orders?

A Correct, and I think that with an average ACT system, why the operator probably needs to test those wells once a month any way, if possible once a month, to insure that they know where the

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production is coming from.

Q Yes, that's another point, Mr. Ramy, the production tests are really nothing more than an estimate at best, is that right?

A That is right.

Q Because you say you have sixteen wells producing into a common tank battery, and unless you test the wells, you don't know how much is coming from any well?

A That is correct.

MR. PAYNE: That's all, thank you.

MR. PORTER: Any further questions of Mr. Ramy?

MR. KELLY: I would like to make a statement on behalf of Texaco. William D. Kelly, Gilbert, White, and Gilbert. The proposed revision in Rule 701 would cause an administrative burden and result in duplication. Such requirement in reporting well tests would be repetition, similar data presently being submitted in Form C-115. Any prudent operator preparing Form C-115 will use the latest available test in calculating the monthly production. Because of this duplication, Texaco feels that this would be an administrative burden on the operator also. Also, in the course of time, Texaco believes that this will put an administrative burden on the Commission. Texaco believes that the present method of reporting monthly by well on Form C-115 will supply the Commission with data to keep it fully advised on the amount of production of wells outside water flood project areas. Therefore, Texaco questions the necessity of reporting monthly well tests.



MR. PORTER: Anyone else have a statement to make?

MR. ERREBO: Burns Errebo, Modrall, Seymour, Sperling, Roehl, and Harris, Albuquerque, on behalf of Sacony Mobil Oil. I have a prepared statement. Socony Mobile Company feels that reporting of monthly well tests on both the wells in and associated with water flood areas, will require additional reporting work load and an expense not equal to the value of such reporting. It is respectfully requested that the Commission retain Rule 701 as it now stands or consider reporting such well tests on a schedule of once every three months.

MR. ANDERSON: I am R. M. Anderson of Sinclair Gas Company. We have considered this matter and we are of similar opinion to the other two gentlemen that just spoke. We believe that the individual production is being adequately reported each month on Form C-115. We feel that any modification of Form C-115 would tend to provide duplication of that type of data and would be just a duplication and would result in unnecessary administrative expense. One other thought, we have, on the testing of the wells in a water flood area, an operator is particularly anxious to know what his wells in the area are doing and what the wells in near proximity to the area are doing in order to evaluate his flood and to continue to evaluate it, so in those areas an operator will have even a better idea of the capability of his wells, and therefore, I believe that the C-115s that are turned in for the water flood areas more accurately reflect the individual well production than they would tend to do in

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primary areas.

In order to prepare C-115s, the operator has to have information from the field, from his pumpers, gaugers, that are actually producing the wells, and those men know, they know from working with the wells what those wells can do. They know from short tests, not official gas oil ratio tests through test separators or test equipment, but through short tests of several hours duration whenever they get a chance through the week. They test their wells often enough so that they know what the wells are doing, and we make up our reports and other operators do too, I'm sure, on the basis of that information from the field, so we feel it is unnecessary to run special tests and we feel that it is unnecessary to require any additional reports than the C-115 that we are reporting now.

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, Santa Fe, representing Continental Oil Company. Continental Oil Company does not at the present time have any water flood projects, but they do have some such projects under contemplation, and it is the feeling of Continental that the information required by these tests is presently available to the Commission, and that the additional testing and reporting in particular, would, even though restricted in the case as advertised, those tests would still pose an undue and unnecessary burden on the operators. If such testing is felt necessary, it is Continental's position that a semi-annual test at the most is all that would be necessary to give the Commission the information required under this proposal.

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MR. CAMPBELL: If the Commission please, Jack M. Campbell, Cambell and Russell, Roswell New Mexico, appearing for Graridge Corporation. It is the position of Graridge Corporation that although they at the present time have no projects which as I understand Mr. Ramy testified would be in effect by this proposed rule, inasmuch as all of their projects ~~were~~ operating at the time the prorated water flood system went into effect, they too, perhaps in the future will be affected by this rule. It is the feeling of Graridge that the actual production reports, and I think the Commission must assume their accuracy, if there is any indication that they are not accurate, the Commission has ample authority to require testing of any nature. They must assume the accuracy of these reports, whether the reports be based on primary production or secondary production, or a combination of both. Actually, the production records over a longer time reflect more accurately the actual production of a well than a well test at a particular time. It is true that water flood operators do take a selective well test for engineering and operational purposes, but that is quite different from being required to take monthly tests perhaps on a large number of wells outside of a project area on occasions being quite removed in distance producing into an ACT unit. Certainly we sympathize with the desires of the Commission to make certain within a reasonable basis, the accuracy of reporting of all well production, whether it be in primary production or whether it be in water floods, but it seems to us that the amount of information and the nature of informa-



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tion that would be obtained from this type of a test would not add a sufficient amount of accuracy or information for the Commission to justify what is obviously an additional added expense and require additional field personnel. It is true that all of the LACT units have to have individual well testing equipment, and any time The Commission requires it, I assume they could require that any test be made on those individual wells if there was any reasonable doubt about what the operator put in his report, and that is going to be true whatever type of production you have. It appears to me that this type of rule simply will not provide a sufficient amount of more accurate information than you receive to justify the operators additional expense. We feel that if such a program is necessary, that the test should not be required more often than six months, and of course, when an allowable increase is requested for a well, or where there is water injection to the well, you have to take a test in any event. I would like to also suggest this, Mr. Ramsey's suggestion here this morning was to some extent modifying what appeared in the original notice, and it seems to me it might be appropriate if the staff could prepare a change in the rule, an actual amendment of the rule, so that the operators could be furnished with it and perhaps given a period of ten days time or something in which they could submit written statements with regard to it because it is considerably different from what the -- I originally understood was the proposal of the Commission staff, and it may be that some of the objections on the new proposal would not be quite as serious



as would have been made on what we considered to be the original proposal.

MR. KASTLER: Bill Kastler, appearing for Gulf Oil Corporation. Gulf feels that the data presently reported on Forms C-115 and C-120 contain adequate information for the Commission to be fully advised on the current progress of the water flood project, and that the requirement to conduct and report monthly well tests would be burdensome on the water flood operators.

MR. PAYNE: I might say, first, Mr. Commissioner, that we received an objection from Ambassador Oil Corporation. It isn't entirely clear whether its objection is to the proposed rule as advertised or whether it goes to the requirement of any well test.

I would like to say this, though, on behalf of Mr. Ramy and myself. The Commission has entered an order prorating water flood projects now, the proration manager of this Commission, who is more familiar with proration than perhaps any one else, has testified that you can't properly prorate water floods unless you have some control over wells outside of the project area which are producing into common facilities with that water flood oil. Now, there might be some merit in these objections if they went to the rule, proposed rule as advertised and as shown on this docket, but there is no duplication here. This is a test which is not required at present and which the operators do not take. The tests which he proposes be required are tests on primary wells, they are not water flood wells at all, they are outside the water flood project.

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The production that is presently being attributed to these wells as shown on the C-115 is a rough estimate at best. The witness has also pointed out that the Form C-120 is more current than the Form C-115. Therefore, giving us a more up-to-date allowable control in these prorated water flood projects.

I would also like to state that if you really wanted to control the production from prorated water food projects, you should require separate tankage, but the witness being practical and understanding the position of the operators and Commission, has not required that separate tankage or even separate metering be installed. The most he has asked and which he says is the bare minimum, is that the primary wells producing into common facilities with water flood wells be tested once each month. It seems to me that this is a very reasonable proposal if you intend to achieve what you hope to achieve when you enter an order prorating water floods.

MR. PORTER: Anyone else have a statement? The Commission feels that at least one of Mr. Campbell's points is well taken, that was the one in which he referred to the revision which was made here at the hearing. It is quite different from the rule, proposed rule, which has been circulated. The Commission will delay a decision or the entrance of an order for a period of thirty days. In the meantime, we will circulate the rule, the proposed rule as recommended by Mr. Ramy here this morning to our mailing list and invite the reactions of any interest parties.

MR. PAYNE: Is it my understanding, Mr. Commissioner,

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that you are, however, taking the case under advisement?

MR. PORTER: We are taking the case under advisement.

This is not a continuation of the case.

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STATE OF NEW MEXICO)
)
 COUNTY OF BERNALILLO) ss

I, J. A. Trujillo, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in Stenotype and reduced to typewritten transcript by me, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal, this the 15th day of March, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Joseph A. Trujillo
 NOTARY PUBLIC

My Commission Expires:

October 5, 1960

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